Final Environmental Impact Statement for the Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah, NUREG-1714, December 2001

**Section 9.4.2 Mitigation Measures** 

# 9.4.2 Mitigation Measures

The impact analyses contained in Chapters 4 and 5 of this FEIS have identified various mitigation measures PFS has either committed to or could take to reduce the environmental impacts associated with the proposed action. This section identifies the mitigation measures discussed in Chapters 4 and 5 that the staffs of the NRC, BIA, BLM, and STB propose be required and included, as appropriate, as part of each agency's record of decision.

### **Environmental Condition 1. Best Management Practices**

In addition to the Best Management Practices for construction identified in Table 2.7 of this FEIS, PFS shall employ the following Best Management Practices for construction and operation of the proposed PFSF and related local transportation facilities.

- A. Minimize land area disturbances by disturbing the smallest practicable area of land near the ephemeral streams along the proposed rail line corridor.
- B. Establish staging areas for construction equipment in areas that are not environmentally sensitive to control erosion and spills.
- C. Control temporary noise from construction equipment through the use of work-hour controls, and the operation and maintenance of muffler systems on machinery.
- D. Ensure that construction and operational activities will not lead to contamination of groundwater, through a spill response procedure that provides for an appropriate response to a spill of oil or fuel at the PFSF or related transportation facilities.

## **Environmental Condition 2. Ecological Resources**

- A. PFS has consulted with the FWS regarding threatened or endangered species that may be present in the project area. Prior to initiating construction, PFS shall complete biological surveys in the locations identified below for the presence of sensitive species that may be found at those locations. Such surveys will be based on the most current lists of sensitive and/or threatened or endangered species maintained by appropriate government agencies. When the project construction schedule is determined, PFS shall consult with BIA, the Skull Valley Band, and BLM regarding the appropriate timing of the surveys. PFS shall include the following species (and any additional ones, if identified as sensitive) in the biological surveys
  - Proposed PFSF site and the area within 0.8 km (0.5 mile) of the site
    - Loggerhead shrike
    - Burrowing owl
    - Skull Valley Pocket Gopher
    - Kit fox
    - Pohl's milkvetch
  - Proposed rail line and the area within 30 m (100 ft) of rail line construction
    - Skull Valley pocket gopher
    - Kit fox
  - Proposed rail line and the area within 0.8 km (0.5 mile) of the rail line corridor
    - Raptors (eagles, hawks, falcons, owls, loggerhead shrike)
- B. If any of the surveys required in Condition 2.A identify the presence of a sensitive species, PFS shall immediately notify the appropriate Federal agency with management responsibility (BIA or BLM).

- C. If PFS identifies any Federally-listed threatened or endangered species within the proposed PFSF site area during construction, PFS shall immediately cease construction activities and notify BIA. If PFS identifies any Federally listed threatened or endangered species, or any State of Utah or BLM sensitive species during construction of the transportation facilities related to the proposed PFSF, PFS shall immediately cease construction activities and notify BLM.
- D. If any Federally listed threatened or endangered species are taken by construction or operation of the proposed PFSF or its related transportation facilities, PFS shall immediately notify the U.S. FWS, BIA, the Skull Valley Band, or BLM, as appropriate.
- E. If any State or BLM listed threatened or endangered species are taken by construction or operation of the transportation facilities related to the proposed PFSF, PFS shall immediately notify BLM and the Utah State Department of Natural Resources.
- F. PFS shall complete any necessary biological assessment activities to support NRC, BIA or BLM's consultation requirements under the Endangered Species Act of 1973, and any BLM consultation agreements with the State of Utah.
- G. Prior to initiating operations, PFS shall consult with NRC, BIA and the Skull Valley Band to develop an adequate wildlife monitoring program to be implemented during operation of the proposed PFSF.
- H. Prior to initiating construction, PFS shall consult with BIA and BLM to develop an adequate plan for restoring and revegetating areas affected by construction of the proposed PFSF and related rail transportation facilities. (Includes greenstrip seed mix specifications)
- I. Prior to initiating construction, PFS shall consult with BIA and BLM to develop an adequate plan for monitoring and controlling exotic and noxious weeds during construction and operation of the proposed PFSF and the proposed rail line. The plan must also include an approved list of herbicides.
- J. Prior to initiating construction, PFS shall consult with BIA and BLM to develop an adequate plan for fire prevention, suppression, and rehabilitation during construction and operation of the proposed PFSF and related rail facilities.
- K. Prior to construction of the rail line, PFS shall consult with BLM to determine the appropriate design, number, and locations for rail crossings to allow fire suppression equipment to cross the rail line.
- L. PFS shall consult with BLM to develop an adequate plan to minimize impacts to livestock grazing activities during construction and operation of the rail facilities.
- M. PFS shall ensure power poles and lines on the proposed PFSF are constructed to either conform to the guidance in "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996," or more recent guidance as determined by BIA.

#### **Environmental Condition 3. Cultural Resources**

- A. Before beginning construction of a rail line from Skunk Ridge to the Reservation, PFS shall implement all the mitigation measures required in the Memorandum of Agreement (MOA) developed through the Section 106 consultation process (stipulations of the Agreement include Items B through G, below).
- B. If PFS identifies any previously unrecorded artifacts or other cultural resources during construction activities on land under the jurisdiction of BLM, PFS shall immediately cease construction in the immediate vicinity of the discovery, inform BLM of the identified resources,

and arrange for evaluation of the resources by a qualified individual to be retained by PFS.

- C. If PFS identifies any previously unrecorded artifacts or other cultural resources during construction activities on the Reservation, PFS shall immediately cease construction in the immediate vicinity of the discovery, inform BIA and the Skull Valley Band of the identified resources, and arrange for evaluation of the resources by a qualified individual to be retained by PFS with the consent of the tribe.
- D. A qualified individual shall evaluate any resources identified during construction pursuant to Conditions 3.B and 3.C and shall recommend whether such resources are eligible for listing on the *National Register*.
- E. If resources eligible for listing on the *National Register* are identified pursuant to Condition 3.D, PFS shall describe, in detail, their characteristics and take the appropriate mitigation measures determined through NHPA required consultation.
- F. Upon providing a description of cultural resources required pursuant to Condition 3.E to BLM or upon a BLM determination that cultural resources identified during construction on lands under the jurisdiction of BLM are not eligible for listing under the NHPA, PFS may resume construction on such lands.
- G. Upon providing to BIA a description of cultural resources required pursuant to Condition 3.E above or upon a BIA determination that cultural resources identified during construction on the Reservation are not eligible for on the *National Register*, PFS may resume construction on the Reservation.

## **Environmental Condition 4. Air Quality**

To control fugitive dust during construction, PFS shall implement a dust control program to minimize the off-site movement of fugitive dust. The program shall include measures to minimize dust emissions from construction and earthmoving activities (for both the proposed PFSF site and the new transportation facilities), the concrete batching facility, material transfer points and stockpiles, and temporary or permanent flood protection berms.

#### **Environmental Condition 5. Water Resources**

- A. PFS shall design all culverts and crossings of intermittent streams along the rail line to minimize the potential for ponding, erosion, and sedimentation by matching the existing topography.
- B. Prior to initiating construction, PFS shall develop a monitoring program to allow a determination as to whether the wells nearest the proposed PFSF are adversely impacted from groundwater withdrawal associated with the construction and operation of the proposed PFSF.
- C. PFS shall be responsible for clean-up of any spills or accidents at the proposed PFSF, as well as at the rail siding and along the right-of-way for the rail line. In the event of any such spills or accidents, all clean-up activities shall conform with the clean-up standards set forth in 10 CFR Part 20, 40 CFR 112.7, and applicable State of Utah or EPA requirements.
- D. PFS shall develop a maintenance plan to ensure all culverts are clear of debris to avoid potential flooding and stream flow alteration.

#### **Environmental Condition 6. Traffic**

If PFS determines that continual use of the unimproved roads adjacent to the proposed rail line is necessary to transport either workers or materials, PFS shall consult with BLM to develop an adequate

plan to minimize any degradation of the roads. BLM shall be contacted prior to any use of the unimproved roads that could lead to their degradation.

### **Environmental Condition 7. Construction Training**

Prior to initiating construction, PFS shall identify and train on-site personnel responsible for ensuring that construction activities do not disturb sensitive ecological and cultural resources. PFS shall further ensure that all on-site construction workers are trained on potential sensitive ecological and cultural resources that could occur at the construction sites. This training shall be conducted in coordination with appropriate ecological and cultural resource personnel.

# **Environmental Condition 8. Monitoring and Reporting**

- A. PFS shall provide quarterly reports on compliance with the required construction-related mitigation conditions to the NRC, BLM, BIA, the Skull Valley Band, and STB.
- B. PFS shall certify compliance with all construction mitigation conditions to NRC, BLM, BIA, the Skull Valley Band, and STB (1) at the completion of the rail facility construction and before initiating rail operations and (2) at the completion of the site and access road construction and before initiating operations of the PFSF.